

Mineral Industry Surveys

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LEAD IN MARCH 2000

Domestic mine production, based upon the net quantity of lead recovered in the smelting of concentrate, decreased by 10% in the first quarter of 2000 compared with production in the same period of 1999. Secondary refinery production increased by 4% in March and was up by 2% compared with production in March 1999. Reported consumption remained essentially unchanged in March compared with the previous month.

According to *Platt's Metals Week* published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price (U.S. dollars) declined by 0.07% and 2.45%, respectively, in March.

Demand for lead in the North American market held steady again in March on the strength of battery shipments, although shipments were below March 1999 levels. Most lead producers indicated that they did not expect any significant upturn in lead demand until July, when a seasonal increase in replacement battery demand is anticipated. Declining lead prices continued to be a major concern of the lead producers (Ryan's Notes, 2000a, d). In Europe, the refined lead market remained fairly balanced. Although the demand for lead in the automotive sector declined during the month in Europe, this decline was offset by firmer growth in the industrial battery sector and in other end uses (CRU International Ltd., 2000).

The National Defense Stockpile monthly cash disposal (sale) of lead in March was 3,840 metric tons (4,233 short tons). Sale of lead in the first half of fiscal year 2000 (October 1999 through March 2000) was 26,330 metric tons (29,024 short tons).

Exide Corp. reportedly will close its Reading (Laureldale), PA, battery manufacturing plant by the end of June 2000. According to company officials, the action was taken as a consolidation measure, thus achieving higher capacity utilization at its remaining battery manufacturing plants (Ryan's Notes, 2000c).

Failure of a dam at Romania's State-run Baia Borsa lead-zinc mine in mid-March has prompted the European Union's Environment Commissioner to establish a task force to assess the environmental damage in the area around the dam. Torrential rains and melting snow apparently broke the dam, allowing an

appreciable quantity of lead and zinc ore to spill into a nearby river (American Metal Market, 2000).

Further results from a drilling program conducted by Canada's Minco Mining and Metals Corp. and Teck Corp. at the White Silver Mountain polymetallic property in China showed lead contents of between 5.6% and 10.0%. Earlier drill results had revealed mineralization containing between 3.9% and 4.4% lead. According to a Minco official, the joint venture companies planned additional underground development to allow further drilling and also planned to conduct a surface geophysical program during the year (Mining Journal, 2000).

Full production capacity is expected to be reached at Ireland's Lisheen zinc-lead mine in the second half of 2000. A spokesperson for Ivernia West plc, a joint-venture partner with Anglo American plc in the Lisheen Mine, indicated that annual production rates of about 330,000 tons of zinc and 40,000 tons of lead were anticipated. Lisheen, located about 160 kilometers southwest of Dublin, is estimated to contain sufficient reserves for a mine-life of 14 years (Platt's Metals Week, 2000).

Update

Exide Corp. announced on May 9 that it had signed an agreement to purchase GNB Technologies, Inc. from GNB's parent company, Pacific Dunlop. Reportedly, Exide hoped to conclude the purchase in the fall of 2000, pending U.S. Government approval and the ability to obtain necessary financing (Ryan's Notes, 2000b).

References Cited

- American Metal Market, 2000, Romanian lead, zinc spill draws EU scrutiny: American Metal Market, v. 108, no. 51, March 16, p. 6.
- CRU International Ltd., 2000, Market commentary—Non-automotive uses save Europe: CRU Monitor—Lead, March, p. 3.
- Mining Journal, 2000, Chinese assays: Mining Journal, v. 334, no. 8574, March 17, p. 213.
- Platt's Metals Week, 2000, Lisheen to reach capacity in H2: Platt's Metals Week, v. 71, no. 13, March 27, p. 10.
- Ryan's Notes, 2000a, Lead and zinc: Ryan's Notes, v. 6, no. 13, March 27, p. 4.

———2000b, Lead and zinc—A marriage made in heaven or a risky new strategy?
Exide moves to buy GNB: Ryan's Notes, v. 6, no. 20, May 15, p. 4.
———2000c, Lead and zinc—Exide to close Laureldale SLI plant: Ryan's Notes,

v. 6, no. 10, March 6, p. 3.
———2000d, Lead and zinc—No hope seen for lead until July: Ryan's Notes, v.
6, no. 12, March 20, p. 4.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons, unless otherwise specified)

	1999		2000		
	January - December p/	January - March	February	March	January - March
Production:					
Mine (recoverable)	505,000	127,000	36,700 r/	42,800	114,000
Primary refinery	NA	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,050,000	256,000	85,900	89,000	264,000
Estimated	14,300	4,180	867	839	2,600
Recovered from copper-base scrap e/	15,000	3,750	1,250	1,250	3,750
Total secondary	1,080,000	264,000	88,000	91,100	270,000
Stocks, end of period:					
Primary refineries	XX	XX	NA	NA	XX
Secondary smelters and consumers	XX	XX	71,900	70,400	XX
Imports for consumption:					
Ore and concentrates (lead content)	12,300	1,860	546	NA	546 2/
Refined metal	311,000	44,500	30,500	NA	77,400 2/
Consumption:					
Reported	1,580,000	398,000 r/	132,000	132,000	396,000
Undistributed e/	83,000	21,000 r/	6,950	6,970	20,900
Total	1,660,000	419,000 r/	139,000	139,000	417,000
Exports (lead content):					
Ore and concentrates	93,500	5,280	3,430	NA	5,220 2/
Bullion	64,100	16,300	4,800	NA	10,200 2/
Wrought and unwrought lead	37,300	8,170	3,070	NA	6,520 2/
Ash and residues	1,430	542	2,030	NA	2,340 2/
TEL/TML preparations, based on lead compounds	2,190	552	2,630	NA	2,660 2/
Exports (gross weight): Scrap	117,000	27,700	5,060	NA	11,200 2/
Platt's Metals Week average North American producer price (cents per pound)	43.72	43.72	43.56	43.53	43.57

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

2/ Includes data for January - February only; March data not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
1999:				
March	43.73	507.52	313.03	1.621322
December	43.65	478.74	296.78	1.613130
Year	43.72	502.25	310.49	1.617887
2000:				
January	43.62	471.71	287.56	1.640400
February	43.56	452.02	282.52	1.599985
March	43.53	440.92	279.08	1.579900

Source: Platt's Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP 1/

(Metric tons, gross weight)

Item	Stocks February 29, 2000	Net receipts	Consumption	Stocks March 31, 2000
Battery-lead	21,900	103,000	104,000	20,700
Soft lead	W	W	W	W
Drosses and residues	3,470	5,520	5,640	3,350
Other 2/	1,660	2,430	2,340	1,750
Total	27,000	111,000	112,000	25,800
Percent change from preceding month	XX	+8.9	+12.4	-4.7

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE
SCRAP IN MARCH 2000 1/

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	51,800	--	--
Remelt lead	W	W	W
Antimonial lead	36,700	W	W
Other 2/	W	W	--
Total lead-base	89,000	108	469

W Withheld to avoid disclosing company proprietary data; included in "Total."

-- Zero.

1/ Data are rounded to no more than three significant digits.

2/ Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES 1/

(Metric tons, lead content)

Uses	1999		2000		
	January - December p/	January - March r/	February	March	January - March
Metal products:					
Ammunition, shot and bullets	40,800	11,500	4,120	4,250	11,600
Brass and bronze, billet and ingots	3,790	917	328	338	1,010
Cable covering, power and communication and calking lead, building construction	2,790	560	208	181	686
Casting metals	4,660	1,210	380	380	1,140
Sheet lead, pipes, traps and other extruded products	16,200	3,950	1,290	1,540	4,170
Solder	9,460	2,470	992	581	2,270
Storage batteries, including oxides	1,430,000	361,000	119,000	120,000	360,000
Terne metal, type metal, and other metal products 2/	4,040	635	251	175	984
Total metal products	1,510,000	382,000	127,000	127,000	381,000
Other oxides and miscellaneous uses	63,800	16,100	4,990	5,040	15,000
Total reported	1,580,000	398,000	132,000	132,000	396,000
Undistributed consumption e/	83,000	21,000	6,950	6,970	20,900
Grand total	1,660,000	419,000	139,000	139,000	417,000

e/ Estimated. p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

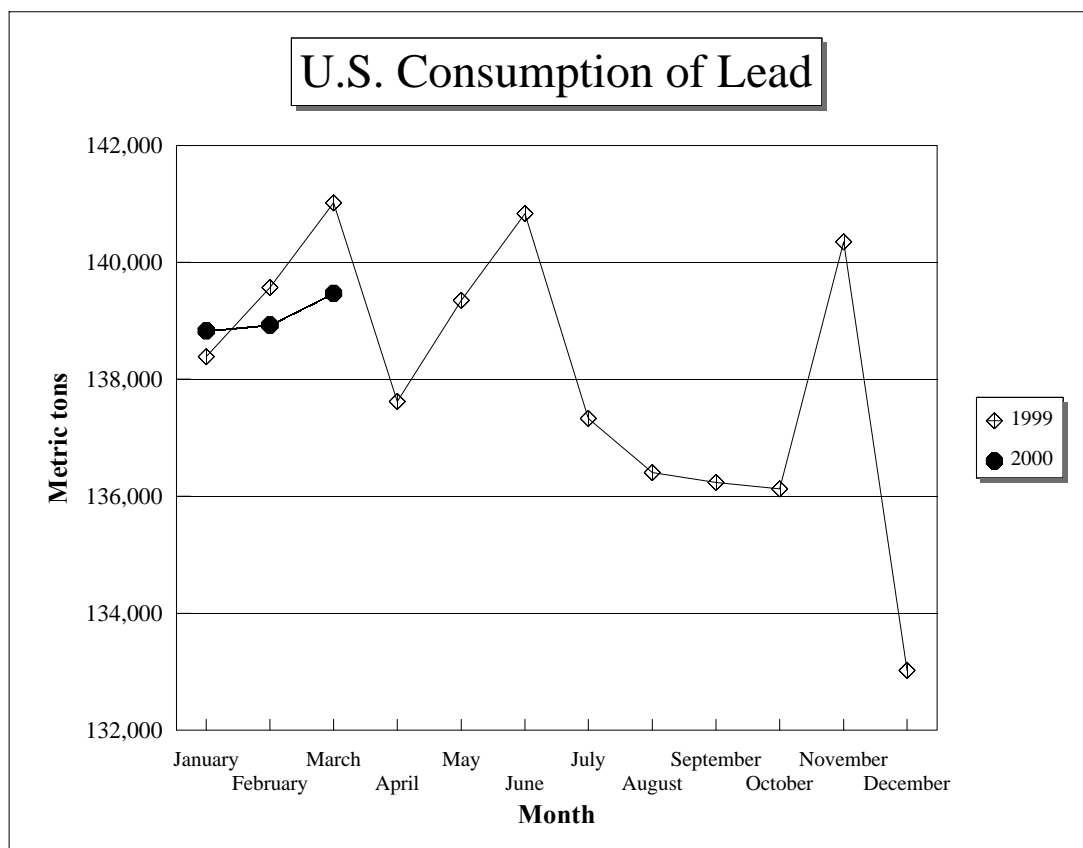


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND
CONSUMPTION OF LEAD IN MARCH 2000 1/

(Metric tons, lead content)

Type of material	Stocks	Net	Consumption	Stocks
	February 29, 2000	receipts		March 31, 2000
Soft lead	32,700	75,700	76,600	31,800
Antimonial lead	24,200	33,600	33,500	24,400
Lead alloys	W	21,500	22,200	W
Copper-base scrap	W	232	232	W
Total	71,900	131,000	132,000	70,400

W Withheld to avoid disclosing company proprietary data; included in "Total."

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS 1/

(Metric tons)

	1999		2000		
	Year	February	January	February	January - February
Lead content:					
Ore and concentrates	93,500	1,450	1,790	3,430	5,220
Bullion	64,100	6,070	5,420	4,800	10,200
Materials excluding scrap	37,300	2,780	3,450	3,070	6,520
Ash and residues	1,430	103	312	2,030	2,340
TEL/TML preparations, based on lead compounds	2,190	201	29	2,630	2,660
Total	198,000	10,600	11,000	16,000	27,000
Gross weight: Scrap	117,000	8,020	6,170	5,060	11,200

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 8
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN 1/

(Metric tons, lead content)

Country of origin	General imports					Imports for consumption				
	1999		2000			1999		2000		
	Year	January - February	January	February	January - February	Year	January - February	January	February	January - February
Ore, matte, etc.:										
Canada	1,220	1,220	(2/)	(2/)	(2/)	(2/)	--	(2/)	(2/)	(2/)
Mexico	1,900	--	--	546	546	1,580	--	--	546	546
Peru	8,760	496	1,270	566	1,840	193	--	--	--	--
Other	30,200	1,970	--	5,010	5,010	10,500	1,860	--	--	--
Total	42,100	3,690	1,270	6,120	7,390	12,300	1,860	(2/)	546	546
Base bullion:										
Colombia	--	--	49	16	65	--	--	49	16	65
Dominican Republic	90	--	--	--	--	90	--	--	--	--
Total	90	--	49	16	65	90	--	49	16	65
Pigs and bars:										
Australia	21,900	--	15,100	--	15,100	21,900	--	15,100	--	15,100
Canada	198,000	35,200	18,900	16,600	36,000	198,000	35,200	18,900	16,600	36,000
China	47,500	--	11,800	12,400	24,200	47,700	--	11,800	12,400	24,200
Germany	1,000	58	46	69	115	1,000	58	46	69	115
Mexico	27,200	8,080	922	1,340	2,260	27,200	8,080	922	1,340	2,260
Peru	6,930	543	--	--	--	6,930	543	--	--	--
Other	8,460	549	149	75	224	8,460	549	149	75	224
Total	311,000	44,500	46,900	30,500	77,400	311,000	44,500	46,900	30,500	77,400
Reclaimed scrap, including ash and residues	--	--	25	--	25	--	--	25	--	25
Grand total	353,000	48,200	48,200	36,600	84,800	324,000	46,300	47,000	31,000	78,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.